What we claim is,

1. Use of compounds of the general Formula

$$R^3$$
 O
 N
 R^1
 R^2

(wherein

R³ stands for hydrogen or hydroxy;

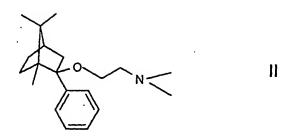
R¹ stands for hydrogen or alkyl; and

R² stands for alkyl)

and pharmaceutically acceptable acid addition salts for the preparation of pharmaceutical compositions having neuroprotective effect.

2. Use according to Claim 1 for the preparation of pharmaceutical compositions suitable for the reduction of the consequences of acute ischemic or traumatic brain and spinal damages, especially the various types of stroke or cerebral vasospasm, severe brain vessel occlusion, neuronal loss and its functional consequences in the case of head and spinal injuries caused by accidents.

- 3. Use according to Claim 1 for the preparation of pharmaceutical compositions having chronical neurodegenerative effect.
- 4. Use according to Claim 3 for the preparation of pharmaceutical composition suitable for the treatment of motoneuron disease (ALS), sclerosis multiplex or Creutzfeld-Jakob disease.
- 5. Use according to any of Claims 1-4 wherein (1R,2S,4R)-(-)-2-(2-dimethylaminoethoxy)-2-phenyl-1,7,7-trimethyl-bicyclo[2.2.1]heptane (deramciclane) or a pharmaceutically acceptable acid addition salt is used as compound of the general Formula I.
- 6. Use according to Claim 5 wherein (1R,2S,4R)-(-)-2-(2-dimethylaminoethoxy)-2-phenyl-1,7,7-trimethyl-bicyclo[2.2.1]heptane-fumarate (deramciclane-fumarate) is used as compound of the general Formula I.
- 7. Use according to Claim 1 wherein (1R,2S,4R)-(-)-2-(2-dimethylaminoethoxy)-2-phenyl-1,7,7-trimethyl-bicyclo[2.2.1]heptane of the Formula



or a pharmaceutically acceptable acid addition salt containing not more than 0.2 % of (1R,3S,4R)-3-[2-(N,N-dimethylaminoethyl)]-1,7,7-trimethyl-bicyclo[2.2.1]heptane-2-one of the Formula

or a pharmaceutically acceptable acid addition salt thereof is used as compound of the general Formula I.

8. Use according to Claim 7 wherein (1R,2S,4R)-(-)-2-(2-dimethylaminoethoxy)-2-phenyl-1,7,7-trimethyl-bicyclo[2.2.1]heptane-fumarate containing not more than 0.2 % of (1R,3S,4R)-3-[2-(N,N-dimethylaminoethyl)]-1,7,7-trimethyl-bicyclo[2.2.1]heptane-2-one-fumarate is used as compound of the general Formula I.

- 9. Use according to any of Claims 1-4 wherein (1R,2S,4R)-(-)-2-(2-methylaminoethoxy)-2-phenyl-1,7,7-trimethyl-bicyclo[2.2.1]heptane; (1R,2S,7R)-2-phenyl-2-(2-methylaminoethoxy)-7-hydroxymethyl-1,7-dimethyl-bicyclo[2.2.1]heptane; or (1R,2S,7R)-2-phenyl-2-(2-ethylaminoethoxy)-7-hydroxymethyl-1,7-dimethyl-bicyclo[2.2.1]heptane or a pharmaceutically acceptable acid addition salt thereof is used as compound of the general Formula I.
- 10. Neuroprotective pharmaceutical composition comprising as active ingredient a compound of the general Formula I (wherein R¹, R² and R³ are as stated in Claim 1) or a pharmaceutically acceptable acid addition salt thereof in admixture with inert pharmaceutically acceptable solid or liquid pharmaceutical active ingredient and/or auxiliary agent.
- 11. Pharmaceutical composition according to Claim 10 suitable for the reduction of the consequences of acute ischemic or traumatic brain and spinal damage, especially the various types of stroke or cerebral vasospasm, severe brain vessel occlusion, neuronal loss and its functional consequences in the case of head and spinal injuries caused by accidents.

- 12. Pharmaceutical composition according to Claim 10 suitable for the treatment of neurodegenerative diseases.
- 13. Pharmaceutical composition according to Claim 11 suitable for the treatment of motoneuron disease (ALS), sclerosis multiplex or Creutzfeld-Jakob disease.
- 14. Pharmaceutical composition according to any of Claim 10-13 comprising (1R,2S,4R)-(-)-2-(2-dimethylaminoethoxy)-2-phenyl-1,7,7-trimethyl-bicyclo[2.2.1]heptane of the Formula II or a pharmaceutically acceptable acid addition salt as compound of the general Formula I.
- 15. Pharmaceutical composition according to Claim 14 comprising (1R,2S,4R)-(-)-2-(2-dimethylaminoethoxy)-2-phenyl-1,7,7-trimethyl-bicyclo[2.2.1]heptane-fumarate as compound of the general Formula I.
- 16. Use of compounds of the general Formula I (wherein R¹, R² and R³ are as stated in Claim 1) and pharmaceutically acceptable acid addition salts thereof as neuroprotective pharmaceutical active ingredient.
- 17. Use according to Claim 16 for the reduction of the consequences of acute ischemic or traumatic brain and spinal

damages, especially the various types of stroke or cerebral vasospasm, severe brain vessel occlusion, neuronal loss and its functional consequences in the case of head and spinal injuries caused by accidents.

- 18. Use according to Claim 16 for the treatment of chronical neurodegenerative diseases.
- 19. Use according to Claim 16 for the treatment of motoneuron disease (ALS), sclerosis multiplex or Creutzfeld-Jakob disease.
- 20. Use of (1R,2S,4R)-(-)-2-(2-dimethylaminoethoxy)-2-phenyl-1,7,7-trimethyl-bicyclo[2.2.1]heptane of the Formula II and pharmaceutically acceptable acid addition salts thereof in the indications according to Claims 16-19.
- 21. Use of (1R,2S,4R)-(-)-2-(2-dimethylaminoethoxy)-2-phenyl-1,7,7-trimethyl-bicyclo[2.2.1]heptane-fumarate in the indications according to Claim 16-19.
- 22. Neuroprotective method of treatment which comprises administering to the patient in need of such treatment a compound of the general Formula I or a pharmaceutically acceptable acid addition salt thereof, perferably (1R,2S,4R)-(-)-

2-(2-dimethylaminoethoxy)-2-phenyl-1,7,7-trimethyl-bicyclo[2.2.1]heptane of the Formula II or a pharmaceutically acceptable acid addition salt thereof in a therapeuticly active amount.